

Claims

- [c1] 1. A package method for an organic electro-luminescent display, applicable under an inert gas environment, the package method comprising at least:
 - providing a panel, on which an organic electro-luminescent display is disposed;
 - providing a lamination plate, which has at least one trench formed at an edge thereon;
 - forming a frame sealant interposed between the panel and the lamination plate; and
 - performing an alignment and lamination process on the panel and the lamination plate.
- [c2] 2. The package method according to claim 1, wherein the step of forming the frame sealant includes coating a sealing agent on the panel.
- [c3] 3. The package method according to claim 1, wherein the step of forming the frame sealant includes coating a sealing agent on the lamination plate.
- [c4] 4. The package method according to claim 1, further comprising a step of controlling an amount of a sealing agent by gas pressure adjustment for forming the frame sealant.
- [c5] 5. The package method according to claim 1, further comprising a step of controlling an amount of a sealing agent by screw thrusting for forming the frame sealant.
- [c6] 6. The package method according to claim 1, wherein a UV curing resin is used for forming the frame sealant.
- [c7] 7. The package method according to claim 6, further comprising a step of radiating ultra-violet light to cure the UV curing resin during the step of performing the alignment and lamination process.
- [c8] 8. The package method according to claim 1, wherein a thermal curing resin is used for forming the frame sealant.
- [c9] 9. The package method according to claim 7, further comprising a step of

performing a thermal process to cure the thermal curing resin during the step of performing the alignment and lamination process.

- [c10] 10. The package method according to claim 1, further comprising coating a sealing agent with a pattern of dots, circles, rectangles, parallel strips, cross lines or a tree-like pattern for forming the frame sealant.
- [c11] 11. The package method according to claim 1, wherein the step of providing the lamination plate further comprises forming the trench in a form of a continuous frame.
- [c12] 12. The package method according to claim 1, wherein the step of providing the lamination plate further comprises forming the trench in a form of multiple broken straight trenches.
- [c13] 13. The package method according to claim 1, wherein the alignment process further comprises using a mechanical alignment or an optical charge-coupled device alignment.
- [c14] 14. A package apparatus for an organic electro-luminescent display, comprising at least:
 - a panel supply system, to provide a panel comprising an organic electro-luminescent display thereon;
 - a sealing agent coating system, to interpose a certain amount of a sealing agent between the panel and a lamination plate;
 - a lamination plate supply system, to provide the lamination plate which further comprises a trench formed at a periphery thereon;
 - an alignment and lamination system, to align and laminate the lamination plate and the panel; and
 - a curing system, to cure the sealing agent.
- [c15] 15. The package apparatus according to claim 14, wherein the sealing agent is coated on the panel by the sealing agent coating system.
- [c16] 16. The package apparatus according to claim 14, wherein the sealing agent is coated on the lamination plate by the sealing agent coating system.

- [c17] 17. The package apparatus according to claim 14, wherein the sealing agent comprises a UV curing resin.
- [c18] 18. The package apparatus according to claim 17, wherein the UV curing resin is cured by ultra-violet radiation.
- [c19] 19. The package apparatus according to claim 14, wherein the sealing agent comprises a thermal curing resin.
- [c20] 20. The package apparatus according to claim 19, wherein the thermal curing resin is cured by a thermal process.